

WHAT IS CLAIMED IS:

1. An image processing apparatus, comprising:
a dividing unit to divide an image into a plurality of regions based on a division signal;
a generating unit to generate components of the respective divided regions;
an encoding unit to encode the generated components; and
a combining unit to combine the encoded components into a codestream.
2. The image processing apparatus as claimed in claim 1, wherein
the encoding unit encodes the generated components using different encoding methods.
3. The image processing apparatus as claimed in claim 1, wherein
the encoding unit encodes the generated components using different levels of quantization.
4. The image processing apparatus as claimed in claim 1, further
comprising:
a converting unit to change the data format of the generated component prior to
the encoding of the generated component.
5. The image processing apparatus as claimed in claim 1, wherein the
dividing unit divides the image into a region of interest and the other region.
6. The image processing apparatus as claimed in claim 1, wherein the
dividing unit divides the image into at least two of a text region, a drawing region, a

photograph region, and a background region based on the division signal.

7. The image processing apparatus as claimed in claim 1, further comprising:

a recognizing unit to recognize the regions of the image, generate the division signal based on the recognition, and transmit the generated division signal to the dividing unit.

8. An image forming apparatus, comprising:

the image processing apparatus that encodes an image into a codestream, when the image processing apparatus comprises a dividing unit to divide an image into a plurality of regions based on a division signal, a generating unit to generate components of the respective divided regions, an encoding unit to encode the generated components, and a combining unit to combine the encoded components into a codestream,

a storing unit to store the codestream;

an image decoding apparatus to decode the codestream stored in the storing unit into the image; and

an image forming unit to form the decoded image.

9. A method of processing an image, comprising:

dividing an image into a plurality of regions based on a division signal;

generating components of the respective divided regions;

encoding the generated components; and

combining the encoded components into a codestream.

10. An article of manufacture having one or more recordable medium storing instructions which, when executed by a computer, cause the computer to perform a

method comprising:

dividing an image into a plurality of regions based on a division signal;
generating components of the respective divided regions;
encoding the generated components; and
combining the encoded components into a codestream.

11. The article of manufacture as claimed in claim 10, wherein
encoding the encoded components comprises encoding the generated components
using different encoding methods.

12. The article of manufacture as claimed in claim 10, wherein
encoding the encoded components comprises encoding the generated components
using different levels of quantization.

13. The article of manufacture as claimed in claim 10, wherein the method
further comprises:
changing the data format of the generated component prior to the encoding of the
generated component.

14. The article of manufacture as claimed in claim 10, wherein
dividing the image comprises dividing the image into a region of interest and the
other region.

15. The article of manufacture as claimed in claim 10, wherein
dividing the image comprises dividing the image into at least two of a text region,
a drawing region, a photograph region, and a background region based on the division
signal.

16. The article of manufacture as claimed in claim 10, wherein the method further comprises:

recognizing the regions of the image, generating the division signal based on the recognition, and transmitting the generated division signal to the dividing unit.